

Phoretic Phenomena at the Interface of Liquid Phases, by
L. I. Delinay.

RUSSIAN, per, Izvestija Akademii Nauk SSSR, Series
Chimicheskaya, No 4, 1937, pp 1433-1450. CIA 9017556
Otel Kankaut

BRH 5-18

Sci ~ Chemistry
Apr 58

61,696

Solubility Polytherms of Secondary and Tertiary
Potassium Orthophosphate in Water, by M. I. Ravich,
Li. pr.

Otdel Khim Nauk

RUSSIAN, PERIODICAL, Iz Ak Nauk SSSR, Ser. Khim, No 1, 1958,
pp 137-146.

SLA R-3529

Sci

Aug 59

93, 549

Vuks, M. F. and Ioffe, V. A.

DIFFUSION SPECTRA OF TWO-COMPONENT SILICATE GLASSES (Spektry Rasseyaniya Dvukhkomponentnykh Silikatnykh Stekol). [1962] [19]p. (foreign text included) 5 refs.

Order from OTS or SLA \$1.60 62-16405

Trans. of Akademiya Nauk SSSR. [Otdelenie Tekhnicheskikh Nauk]. Izvestiya, 1938, no. 3, p. 61-69.

DESCRIPTORS: *Spectrographic analysis, *Glass, *Silicates, Ramon spectroscopy, Sodium, Lead.

(Materials--Ceramics, TT, v. 8, no. 11)

62-16405

I. Vuks, M. F.
II. Ioffe, V. A.

Office of Technical Services

Trotksky, M. V.	BYPRODUCTS OF ALKALINE FUSION OF SODIUM BENZENESULFONATE TO PHENOL, AND THEIR ISOLATION AND UTILIZATION. [1961] Sp. Order from ATS \$15.00	ATS-75N49R	1. Sulfonates--Chemical reactions 2. Phenol--Chemical reactions I. Trotksky, M. V. II. ATS-75N49R III. Associated Technical Services, Inc., East Orange, N. J.
Transl. of Akad. Nauk SSSR. Otdeleniye Kemiicheskikh Nauk. Zveschaniya 1940, no. 1, p. 127-134.	Nauk SSSR. Otdeleniye Kemiicheskikh Nauk. Zveschaniya 1940, no. 1, p. 127-134.		1021-3
(Chemistry--Organic, TT, v. 5, no. 11)			QJ-2117 Office of Technical Services

Rubinshtain, A. M. DEHYDROGENATION ON NICKEL CATALYSTS OF DIFFERENT EXTENT OF DISPERSION. [1961] 7p. 17 refs. Order from OTS or SLA \$1.10	61-16861 1. Rubinshtain, A. M.
Trans. of Akademiya Nauk SSSR. Otdelenie Khimi- cheiskikh Nauk. Izdatiya. 1940, no. 1, p. 135-142.	176588
DESCRIPTORS: *Dehydrogenation, Catalysis, *Ni; cat- alyst, Cyclohexanes.	Office of Technical Services
The dependence of the activity of nickel-alumina cata- lysts upon the dispersion of nickel has been investigated for the case of dehydrogenation of aliphatic and naph- thalene compounds. The study was carried out with seven preparations of the catalyst, in which the dispersion of nickel varied from 19 to 122 Å. Activity-dispersion isotherms were constructed for dehydrogenation of cy- clohexane and formic acid. The dependence of the (Chemistry--Organic, TT, v. 6, no. 6) (over)	

Rubinshtain, A. M.

CATALYTIC HYDROGENATION IN THE VAPOR
FLAME AS AFFECTED BY THE DISPERSION OF THE
CATALYST. [1961] 6p. 30 refs.

Order from OTS or SLA \$1.10

61-16863

Trans. of Akademiya Nauk SSSR, Otdelenie
Khimicheskikh Nauk, Izvestiya, 1960, no. 1,
p. 144-150.

DESCRIPTORS: *Benzene, *Carbon compounds,
*Monoxide, *Hydrogenation, *Alumina-nickel
catalysts, Chemical reactions, Catalysts, Vapors.

The reactions of hydrogenation of benzene and of carbon
monoxide to methane in the presence of nickel-alumina
catalysts of different extents of dispersion were
investigated. It was shown that the activity of the
catalysts depends upon the dispersion of the active
(Chemistry--Organic, TT, v. 6, no. 6) (over)

61-16863

L. Rubinshtain, A. M.

176590

Office of Technical Services

Eldus, Ya. T. and Netchaeva, N. N.
EFFECT OF SOME ELECTRICAL FACTORS ON THE
CHEMICAL REACTIONS OF ETHYLENB IN HIGH
FREQUENCY CORONA DISCHARGE. [1961] Sp. 22 refs.
Order from OTS or SLA \$1.10 61-16862

Trans. of Akademiya Nauk SSSR. Otdelenie Khimi-
cheskikh Nauk. Izvestiya, 1940, no. 1, p. 153-160.

DESCRIPTORS: *Ethylenes, Chemical reactions, High
frequency, Electrical corona, Electrical properties.

Experiments are reported on the effect of the wattage
and frequency of high frequency corona discharge with
damped oscillations on chemical conversions of ethyl-
ene and particularly on its dehydrogenation to acety-
lene. The wave length within 190 to 500 meters is prac-
tically without any effect. The dependence of the yields
of reaction products (acetylene, hydrogen, paraffins) .
upon the power within 0.3 to 30 watts is given. (Author)
(Chemistry -Physical, TT, v. 6, no. 6)

61-16862

L Eldus, Ya. T.
N. Netchaeva, N. N.

Office of Technical Services

176589

Favorskii, A. E.
RESEARCH ON ACETYLENE DERIVATIVES. [1951]
7p. 2 refs.
Order from OTS or SLA \$1.10

61-18024

Trans. of Akademiya Nauk SSSR, Otdelenie Khimi-
cheskikh Nauk, Izvestiya, 1940, p. 181-188.

DESCRIPTORS: *Acetylene derivatives, Synthesis, Pro-
duction, Chemical industry, USSR, Rubber, Isoprene.

A general review is given of research on acetylene de-
rivatives based on observations originally made as
early as 1888 and 1900. Acetylene alcohols are formed
by condensation of acetylene or vinylacetylene and ke-
tones in the presence of anhydrous potassium hydrox-
ide. Their polymers are good film-forming materials.
Electrolytic hydrogenation of acetylene alcohols in soda
solution gives olefinic alcohols which can be dehydrated
(Engineering-Chemical, TT, v. 6, no. 9) (over)

61-18024

I. Favorskii, A. E.

185400
Office of Technical Services

MAKAROV, S. Z., and SHUL'GINA, M. P.
R-2858. The solubility diagram of potassium carbonate-sodium carbonate-water and its application to the separation of potassium and sodium carbonates. Beklady, 13
Akad. Nauk SSSR, Ser. Khim., p.511-28, 1940. (21p.)

BOCHKAREV, P. F., and BERGMAN, A. G.
R-2940. Physicochemical investigation of the aqueous reciprocal system of potassium ammonium nitrates and monophosphates III. Polytherin of the reciprocal system of potassium and ammonium nitrates and monophosphates. Doklady Akad. Nauk SSSR, Ser. Khim., p.379-95, 1940.
(26p.)

BULLETIN OF THE ACADEMY OF SCIENCES OF THE USSR. DIV. OF CHEMICAL SCIENCE. 1940, NO. 4: [TABLE OF CONTENTS] AND SELECTED ABSTRACTS. [1961]. 4p.

Order from OTS or SLA \$1.10

61-20798

Abstract trans. of Akademiya Nauk SSSR. Otdelenie Khimicheskikh Nauk. Izvestiya, 1940, no. 4, p. 493-508, 552-558, 588-589, 592-595.

DESCRIPTORS: *Chemistry, Abstracting, Periodicals, Glow discharges, Chemical reactions, Reaction kinetics, Hydrogen, Carbon compounds, Monoxides, Sulfides, Oxidation, Spectrographic analysis, Ethynyl radicals, *Acetylene derivatives, Ketones, Alkyl radicals, Vinyl radicals, Synthesis, Polymerization, Catalysts, Catalysts, High pressure research, Conferences.

(Chemistry, 1T, v. 2, no. 7)

(over)

61-20798

- I. Title: Synthesis ...
II. Title: Vinyl ...

Office of Technical Services

BULLETIN OF THE ACADEMY OF SCIENCES OF THE USSR. DIV. OF CHEMICAL SCIENCE, 1940, NO. 5: [TABLE OF CONTENTS] AND SELECTED ABSTRACTS. [1961] 9p. 9 refs.

Order from OTS or SLA \$1.10. 61-20797

Abstract trans. of Akademiya Nauk SSSR. Ordelenie Khimicheskikh Nauk. Izvestiya 1940, no. 5, p. 601-615, 617-626, 681-689.

DESCRIPTORS: *Chemistry, Abstracting, Periodicals, *Exchange reactions, Reaction kinetics, Hydrogen compounds, Peroxides, Decomposition, Alloys, Catalysts, Catalysis, Rubber.

Contents:

Kinetic basis of the method of isotope indicators.

I. Kinetics of exchange reactions, by S. Z. Roginskii (Chemistry, T., v. 7, no. 7) (over)

61-20797

1. Title: Hydropolymerization
- I. Title: Kinetics ...
- II. Title: Catalytic ...

Office of Technical Services

VOLFKOVICH, S. I., BELOPOLSKII, A.P., and
LOGINOVA, A.
R-2949. The physicochemical and technological
analysis of the process of decomposition of phosphates
by means of nitric acid, with production of fertilizers.
Doklady Akad. Nauk SSSR, Ser. Khim., 1940. p.705-
24, (34p.)

P 217
Physicochemical Analysis of Fused Salt Systems, I.
Electrical Conductivity of Binary Systems of Nitrates,
Chlorides and Iodides of Sodium, Potassium, Thallium,
Mercury and Silver, by A. G. Bergman, I. M. Chagin,
22 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Khim Nauk, No 5,
1940, pp 727-738.

Sci Trans Center RT-958
OTS TT-63-20771(27pp)
14,058

Scientific - Chemistry
CTS/DIK

TT-63-20772

Barzakovskii, V. P.
THE DENSITY, VISCOSITY, ELECTRICAL CONDUCTIVITY, AND SURFACE TENSION OF SOME BINARY SALT SYSTEMS IN THE FUSED STATE
[Plotnost', Vyazkost', Elektroprovodnost' i Poverkhnostnoe Nayaizhenie Nekotorykh Binarnykh Solyanykh Sistem v Rasplavленном Sostoyanii]. [1963] [13p]

9refs
Order from OTS, SLA, or ETC \$1.60 TT-63-20772

Trans. of Akademiya Nauk SSSR (Otdelenie Khimicheskikh Nauk), Izvestiya, 1940, no. 5, p. 825-831.
(Abstract available)
Another trans. is available from SLA as RT-957, 11p.

DESCRIPTORS: *Electrochemistry, *Fused materials,
*Salts, *Potassium compounds, *Sodium compounds,
*Calcium compounds, *Barium compounds, *Lead compounds,
*Chlorides, Density, Viscosity, Electrical conductance, Surface tension,
(Chemistry--Physical, TT, v. 11, no. 4) (over)

I. Barzakovskii, V. P.
II. RT-957

Office of Technical Services

Bazhulin, P. A.	Piate, A. F. and others.	61-16875	
OPTICAL METRICS OF INVESTIGATION OF HYDROCARBONS. II. SPECTRA OF COMBINATION SCATTERING OF PARAFFINS. [1961] [5]p. 6 refs.	Order from OTS or SLA \$1.10	I. Bazhulin, P. A. II. Plate, A. P. III. Title: Spectra...	
Trans. of Akademija Nauk SSSR. Otdelenje Khimicheskikh Nauk. Seriya, 1941, no. 1, p. 13-26.			151732
DESCRIPTION: Hydrocarbons, Raman spectroscopy, Optical metrics, Gasoline, Octanes, Fuels, Chemical industry.			
An investigation of the Raman spectra of 19 paraffins is reported and an simplified method of determination of hydrocarbons by optical metrics. The hydrocarbons include: 1-methylpropane, 2-methylbutane, normal heptane, 2-methylpentane, isomethyloctane, normal heptane, 2-methylhexane, methylvalene, 2,2-dimethylpentane, 2,2-dimethylbutane, normal octane, 2-methylheptane, 2-methylheptane, 4-methylheptane, 3,3-dimethyl-		Office of Technical Services	
(Payne) - Spectroscopy, TT, v. 6, no. 7) (over)			

Eidus, Ya. T., Kazinskii, B. A., and Zelinskii, N. D.
EFFECT OF THE CARRIER FOR THE Ni-NnO-
 Al_2O_3 CATALYST ON THE SYNTHESIS OF LIQUID
HYDROCARBONS UNDER ATMOSPHERIC PRESSURE
[1961] Sp. 8 refs.

Order from OTS or SLA \$1.10 61-16879

Trans. of Akademika Nauk SSSR. Otdelenie Khimicheskikh Nauk. Izvestiya, 1941, no. 1, p. 27-33.

DESCRIPTORS: *Catalysts, Synthesis, *Hydrocarbons,
*Gasoline, *Nickel catalysts, Carbon compounds,
Monoxides, Hydrogen, Chemical reactions

Of a number of Soviet kieselguhrs, the advantages of two samples from Caucasus were established. These samples were used after removal of iron compounds from them, which was not necessary in all cases, however. Igniting of the carrier is also superfluous. A third sample of diatomaceous earth gave the highest extent of unsaturation of the obtained gasoline. The (Materials--Fuels, TT, v. 4, no. 7) (over)

61-16879

I. Eidus, Ya. T.
II. Kazanskii, B. A.
III. Zelinskii, N. D.

Office of Technical Services

61-16884

I Eidus, Ya. T.
II Fedichkina, T. L.

Eidus, Ya. T., Fedichkina, T. L. and others.
LOWERING THE REDUCTION TEMPERATURE OF
CATALYSTS FOR SYNTHESIS OF LIQUID HYDRO-
CARBONS FROM CARBON MONOXIDE AND HYDRO-
GEN UNDER ATMOSPHERIC PRESSURE. [1961] 7p.

10 refs.

Order from OTS or SLA \$1.10 61-16884

Trans. of Akademiya Nauk SSSR. Otdelenie Khimicheskikh Nauk. Izvestiya, 1961, no. 1, p. 34-40.

DESCRIPTORS: Temperature, *Catalysts, Synthesis,
*Hydrocarbons, Carbon compounds, Monoxides,
Hydrogen, *Gasoline Nickel catalysts.

Several nickel and cobalt catalysts used for synthesis
of liquid hydrocarbons from carbon monoxide and
hydrogen were investigated to determine whether the
temperatures of their reduction could be lowered. The
nickel catalysts obtained from oxalates and formates,
(Materials + Fuels, T, v. 6, no. 6) (over)

176593

Office of Technical Services

Rubinshteyn, A. M., Pribytkova, N. A. and others.
CATALYSTS FOR SYNTHESIS OF GASOLINE FROM
CARBON MONOXIDE AND HYDROGEN REQUIRING
NO HIGH TEMPERATURE REDUCTION. [1961] 6p.
12 refs.

Order from OTS or SLA \$1.10 61-16889

Trans. of Akademiya Nauk SSSR. Otdelenie Khimi-
cheskikh Nauk. Izvestiya. 1941, no. 1, p. 41-48.

DESCRIPTORS: *Catalysts, Synthesis, *Gasoline,
Carbon compounds, Monoxides, Hydrogen, Reduction,
Temperature, Fuels, Nickel, Cobalt.

A series of nickel and cobalt catalysts for synthesis of
gasoline from hydrogen and carbon monoxide were in-
vestigated, prepared by different methods from dif-
ferent starting materials. Catalysts prepared by de-
composition of ferrocyanides in an atmosphere of hy-
(Chemistry--Organic, TT, v. 6, no. 9) (over)

61-16889

I. Rubinshteyn, A. M.
II. Pribytkova, N. A.

185403
Office of Technical Services

Nametkin, S. S., Rudenko, M. G., and
Gromova, V. N.
ON THE ACTION OF NITRIC ACID ON HYDRINDAN:
PRELIMINARY REPT. [1963] 10p. (formulae omitted)
11 refs.

Order from OTS or SLA \$1.10 63-14391

Trans. of Akademiya Nauk SSSR. Otdelenie Khimi-
cheskikh Nauk. Izdatel'stvo [1941], no. 1, p. 61-66.

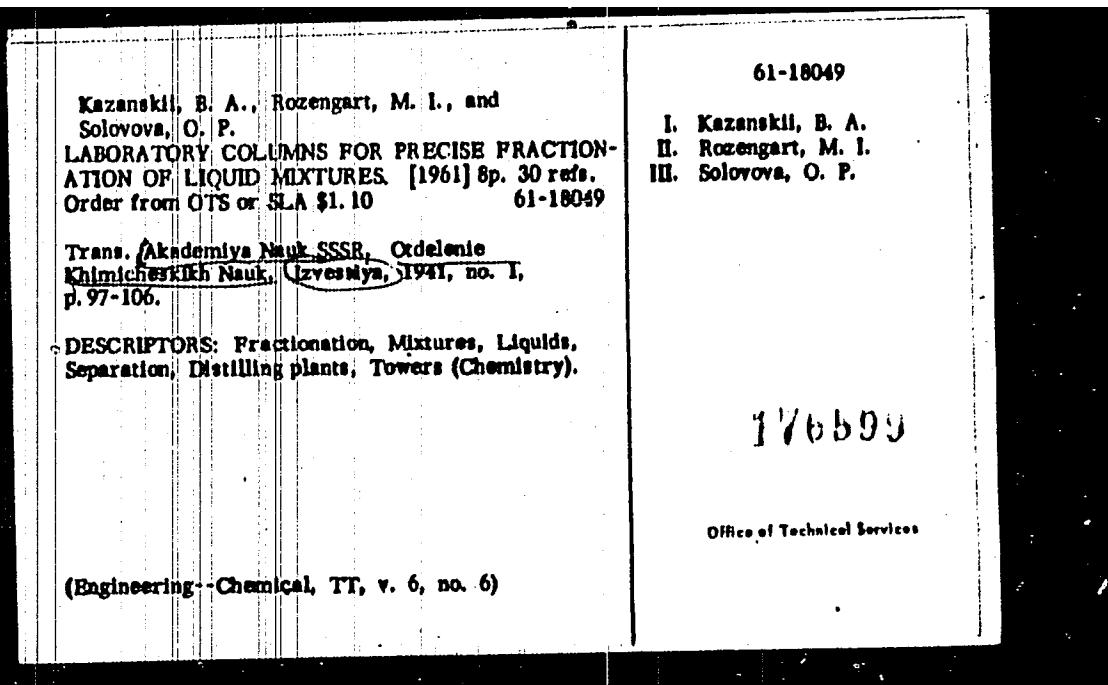
DESCRIPTORS: *Indene, *Nitric acid, *Nitration,
Hydrogenation, Chemical reactions, Chemical
properties.

(Chemistry, TT, v. 10, no. 5)

63-14391

I. Nametkin, S. S.
II. Rudenko, M. G.
III. Gromova, V. N.

Office of Technical Services



Kazanskii, B. A., Solovova, O. P., and Bazhulin, P. A.
HYDROGENATION OF HOMOLOGS OF CYCLOCOPEN-
TANE WITH SCISSION OF THE RING. [1961] 9p.
16 refs.

Order from OTS or SLA \$1.10

61-16888

Trans. of Akademiya Nauk SSSR. Otdelenie Khimiches-
kikh Nauk. 12(1961), no. 1, p. 107-114.

DESCRIPTORS: Hydrogenation, "Cyclopentane"

Ethyl- and propylcyclopentanes are converted into a mixture of paraffins by hydrogenation in the presence of platinized carbon, the scission of the hydrocarbon ring occurring in all possible directions. Isoparaffins are predominantly formed. The direction of the decomposition reaction is affected by the character of the catalyst. On active platinized carbon, ethyl- and propylcyclopentanes decompose, preserving their individual characteristics. On a fatigued catalyst, the (Chemistry--Physical, TT, v. 6, no. 6) (over)

61-16888

I. Kazanskii, B. A.
II. Solovova, O. P.
III. Bazhulin, P. A.

176693

Office of Technical Services

Kazanskii, B. A. and Rozengart, M. I.
POLYMERIZATION OF ISOBUTENE OVER ALUMI-
NUM SILICATE AT DIFFERENT TEMPERATURES.
[1962] [5]p. 12 refs.
Order from OTS or SLA \$1.10

62-14123

Trans. of Akademii Nauk SSSR. Otdelenie Khimiches-
kikh Nauk. Izvestiya. 1961, no. 1, p. 115-119.
Also available from OTS or SLA \$2.60 in 61-20795
[1961] 25p.

DESCRIPTORS: *Butenes, *Aluminum compounds,
*Silicates, *Catalysts, Temperature, Polymerization

(Chemistry--Organic, TT, v. 10, no. 11)

62-14123

I. Kazanskii, B. A.
II. Rozengart, M. I.

Office of Technical Services

<p>Petrov, A. D. ANTIKNOCK PROPERTIES AND POUR POINTS OF INDIVIDUAL HYDROCARBONS OF THE DIESEL FUEL RANGE. I. [1962] 6p 4refs Order from OTS or SLA \$1.10</p> <p>62-14126</p> <p>Trans. of Akademiya Nauk SSSR. Otdelenie Khimicheskikh-Nauk. Izvestiya. 1941, no. 1, p. 145-155. Also available from OTS or SLA \$2.60 in 61-20795 [1961] 25p.</p> <p>DESCRIPTORS: *Fuel oil, *Antiknock, *Hydrocarbons, Methanes, Ethylenes, Naphthalenes, Benzanes, Toluenes, Cyclohexanes, Heptanes, Decenes.</p> <p>(Materials--Fuels, TT, v. 10, no. 10)</p>	<p>62-14126</p> <p>I. Petrov, A. D.</p> <p>Office of Technical Services</p>
---	---

Sergienko, S. R.
MECHANISM AND RELATIVE VELOCITIES OF
AROMATIZATION OF PARAFFIN HYDROCARBONS, I.
[1961] 13p. 55 refs.
Order from OTS or SLA \$1.60

61-16693

Trans. of Akademiya Nauk SSSR. Otdelenie Khimi-
cheskikh Nauk. Izvestiya, 1941 [no. 1] p. 177-190.

DESCRIPTORS: *Hydrocarbons, Catalysts, *Octane,
*Heptane.

The mechanism of conversion of paraffin hydrocarbons
to aromatic hydrocarbons is discussed. The relative
velocities of aromatization of normal heptane and
normal octane were investigated and normal octane was
shown to undergo aromatization at a velocity 1.5 times
higher than normal heptane. With periodic regenera-
(Chemistry--Organic, TT, v. 6, no. 9) (over)

61-16693

I. Sergienko, S. R.

16693

Office of Technical Services

Sergienko, S. R.
CONTACT CYCLIZATION OF PARAFFINIC HYDROCARBONS. II. INVESTIGATION OF THE REACTION PRODUCTS. [1961] 9p. 33 refs.
Order from OTS or SLA \$1.10

61-16695

Trans. of Akademiya Nauk SSSR. Otdelenie Khimicheskikh Nauk. Izvestiya, 1941 [no. 1] p. 191-200.

DESCRIPTORS: *Hydrocarbons, Chemical reactions, Catalysts, Dehydrogenation, *Benzene, Styrenes, Decomposition, *Heptanes, *Octanes.

Two catalysts for dehydrocyclization of aliphatic hydrocarbons were developed. The aromatic hydrocarbons were investigated formed in catalytic cyclization of the heptane-octane and the nonane fractions of synthin on these catalysts at 475°. It was shown that cyclization occurs with predominant formation of (Chemistry--Organic, TT, v. 6, no. 9) (over)

61-16695

I. Sergienko, S. R.
II. Title: Investigation...

185303
Office of Technical Services

Plate, A. F. and Tarasova, G. A.
FORMATION OF AZEOTROPIC MIXTURES OF
OLEFINS WITH PRIMARY ALCOHOLS IN SYNTHESIS
OF OLEFINS USING ORGANOMAGNESIUM COM-
POUNDS. [1961] 6p. 9 refs.
Order from OTS or SLA \$1.10

61-18006

Trans. of Akademiya Nauk SSSR. Otdelenie Khimi-
cheskikh Nauk. Izvestiya. 1941, no. 1, p. 201-205.

DESCRIPTORS: *Alcohols, Synthesis, *Ethylenes,
*Mixtures, Oxidation, Hydrolysis, Fractionation,
Hydrocarbons, Magnesium compounds.

In synthesis of olefins from alkylmagnesium halides
and allyl chloride, a primary alcohol is formed by
oxidation of alkylmagnesium halide followed by hydroly-
sis of the obtained alcoholate. This alcohol forms with
the synthesized olefin an azeotropic mixture with a
minimum boiling point. Thus, 1-heptene forms with
(Chemistry--Organic, TT, v. 6, no. 9) (over)

61-18006

I. Plate, A. F.
II. Tarasova, G. A.

185418

Office of Technical Services

61-18007

Plate, A. P.
CATALYTIC CONVERSIONS OF NORMAL, NEXYL-
CYCLOPENTANE. [1961] 5p. 11 refs.
Order from OTS or \$1A \$1.10 61-18007

Trans. of Akademiya Nauk SSSR. Otdelenie Khimi-
cheskikh Nauk. Izvestiya, 1941, no. 1, p. 206-210.

DESCRIPTORS: *Cyclopentanes, *Catalysts, Gasoline,
Catalysis, Hydrocarbons, Petroleum, Dehydrogenation,
Hexyl radicals.

The behavior of normal hexylcyclopentane was investi-
gated in the presence of platinized carbon at 290-300°
and in the presence of oxide catalysts promoting
aromatization of paraffins at 450-475°. In the first
case, scission of the five-member ring occurs in the
presence of hydrogen and a mixture of undecanes is
formed. In the second case, 20-30% aromatic hydro-
carbons are also formed. Thus, dehydrocyclization of
(Chemistry-Physical, TT, v. 6, no. 8) (over)

1. Plate, A. P.

105130
Office of Technical Services

BULLETIN OF THE ACADEMY OF SCIENCES OF
THE USSR. DIV. OF CHEMICAL SCIENCE, 1941,
NO. 2: [TABLE OF CONTENTS] AND SELECTED
ABSTRACTS. [1961] 9p. 4 refs.

Order from OTS or SLA \$1.10 61-20794

Abstract trans. of Akademiya Nauk SSSR. Otdelenie
Khimicheskikh Nauk. Izvestiya 1941, no. 2,
p. 297-335.

DESCRIPTORS: *Chemistry, Abstracting, Periodicals,
Hydrocarbons, Chemical reactions, *Acetylene derivatives,
Organic acids, Alcohols, Carbinols, Addition
reactions, Isomerization, Ketones, Butenes, Polymeriza-
tion, Scientific research, Colloids, Electrochemistry,
Ethynyl radicals.

(Chemistry, TT, v. 7, no. 7)

(over)

61-20794

- I. Title: Mechanism ...
- II. Title: Mechanism of
addition ...
- III. Title: Mechanism of
addition of alcohols ...

Office of Technical Services

[BULLETIN OF THE ACADEMY OF SCIENCES OF THE USSR. DIV. OF [CHEMICAL SCIENCE] 1941, NO. 4/5; [TABLE OF CONTENTS] AND SELECTED ABSTRACTS. [1961] 5p.]

Order from OTS or SLA \$1.10

62-14131

Abstract trans. of Akademiya Nauk SSSR. Otdelenie Khimicheskikh Nauk. Izvestiya, 1941, no. 4/5, p. 499-518, 521-530, 545-554, 556-564, 621-636.

DESCRIPTORS: *Chemistry, Literature, Abstracting, *Magnesium compounds, Organic compounds, Grignard reagents, *Azo compounds, Alkyl radicals, Ethyl ethers, *Acetylene derivatives, Carbinols, Methyl radicals, Vinyl radicals, Ethynyl radicals, Acetylenes, Allyl radicals, Phenols, Condensation reactions, Water, Dicumarol, Metals, *Corrosion.

(Chemistry--TT v. 8, no. 4)

(over)

62-14131

- I. Title: Interaction...
- II. Title: Condensation...
- III. Title: Dimerization...

Office of Technical Services

Petrov, A. D.		
FUEL FOR HIGH SPEED DIESELS. [1961] 7p. 13 refs.		
Order from OTS or SLA \$1.10	61-18010	
Trans. of Akademiya Nauk SSSR. Otdelenie Khimi- cheskikh Nauk (Bureviya) 1961, no. 4/3, p. 533-543.		
DESCRIPTION: *Diesel engines, *Fuel oil, *Aviation fuels		
A discussion is given of cracked Diesel fuels and the outlook for synthesis of low pour point components of fuels for aviation Diesels. (Author)		
(Materials--Fuels, TIT, v. 6, no. 6)		
		61-18010
		L. Petrov, A. D.
		17E598
Office of Technical Services		

62-14132

I. Title: Mechanism...

[BULLETIN OF THE ACADEMY OF SCIENCES OF THE USSR. DIV. OF CHEMICAL SCIENCE] 1941, NO. 6: [TABLE OF CONTENTS AND SELECTED ABSTRACTS]. [1961] 4p. 5 refs.

Order from OTS or SLA \$1.10

62-14132

Abstract trans. of Akademiya Nauk SSSR. Otdelenie Khimicheskikh Nauk. Izvestiya, 1941, no. 6, p. 643-650, 661-667, 673-680, 695-708.

DESCRIPTORS: *Chemistry, Literature, Abstracting, *Intermetallic compounds, Magnesium alloys, Aluminum alloys, Alloys, *Cerium, Metals, Vapors, Salts, Coatings, Polycyclic compounds, *Halogens-
tion, Theory.

Contents:

To the scientists of all countries

N. S. Kurnakov's theory of intermetallic compounds,
by V. A. Nemilov
(Chemistry, IT, v. 8, no. 4) (over)

Office of Technical Services

Effect of Cerium on the Properties of Magnesium-Aluminum Alloys, by V. I. Mikheyeva,

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Khim Nauk,
No 6, 1941, pp 661-667.

TPA3/TIB Tr No T 4396

Scientific - Min/Metals Mar 55 CTS

21819

INTERACTION OF DIAZOACETIC ESTER WITH
STANNIC CHLORIDE AND FERRIC CHLORIDE,
BY A. N. NESMEYANOV, A. E. X SEGALEVICH.

RUSSIAN, PER, IZ AK NAUK SSSR, OTDEL KHIM
NAUK, NO 1, 1942, PP 8-13

NLL M.4639

SCI - CHEM

JUN 62

199,107

Balandin, A. A. CATALYTIC DEHYDROGENATION OF HYDROCARBONS AND ITS APPLICATION TO SYNTHESIS OF RUBBER FROM GASES. [1961] 24p. 90 refs. Order from OTS or SLA \$2.60	61-18058
Trans. of Akademiya Nauk SSSR. Otdelenie Khimicheskikh Nauk. Izvestiya, 1942, no. 1, p. 21-44. DESCRIPTORS: *Hydrocarbons, *Synthetic rubber, *Dehydrogenation, *Catalysts, Benzenes, Butanes, Butenes, Synthesis, Butadienes, Styrenes, Ethyl radicals. The catalytic dehydrogenation of hydrocarbons on chromic oxide is discussed from the point of view of the author's multiplet theory and examples of dehydrogenation of butane, butene and ethylbenzene given indicating the significance and the applicability of this method for commercial synthesis of butadiene and styrene. (Author)	I. Balandin, A. A. 61-18058 (Chemistry--Organic, TT, v. 6, no. 10) Office of Technical Services

Eldus, Ya. T. and Zelinskii, N. D.	61-16635		
INTERACTION OF CARBON MONOXIDE WITH CO-BALM CATALYSTS USED FOR SYNTHESIS OF GASOLINE FROM WATER GAS. [1961] [9] p. 22 refs.	I. Eldus, Ya. T.		
Order from OTS or SLA \$1.10	I. Zelinskii, N. D.		
Trans. of Akademika Nauk SSSR... Otdelenie Khimicheskikh Nauk. [Izvestiya] 1962 [no. 1] p. 45-53.	61-16635		
DESCRIPTORS: *Gasoline, Synthesis, Hydrocarbons, Carbon compounds, Monoxides, *Cobalt catalysts,			
Interaction of carbon monoxide with the catalyst cobalt-thorium dioxide-kieselguhr used for synthesis of gasoline from water gas was investigated in experiments by the flow method within the temperature interval of 190 to 270°. Interaction in the solid phase leads to formation of a carbide and liberation of free carbon. At 190-210° carbide formation is the prevailing reaction. Carbon is formed in but slight amounts at			
(Materials--Fuels, TT, v. 6, no. 7) (over)			

Office of Technical Services

Physico-Chemical Properties of the Fluorine Compounds of Tetravalent Uranium, by V. G. Khlopin, M. L. Vashchenko, 17 pp. UNCLASSIFIED

RUSSIAN ver, Iz Ak Nauk SSSR Otdel Khim Nauk, Nos 2, 3, 1942, pp 87-97.

AEC Tr 1959

RT-2142

Scientific - Chemistry

18,689

On the Theory of the Rate of Crystallization
Processes at Decreasing Concentration of the
Crystallizing Substance in a Homogeneous Medium
by O. M. Tidmarsh, 13 pp.

Russ. Journ., part 1, Akad. Nauk SSSR, Otdel. Matemat.,
No 2/3, 1942, pp 106-115.

JPRS 4187

Set + Sharp
Nov 60

135, 2

Eidus, Ya. T. and Zelinskii, N. D.
CARBIDE FORMATION AS AN INTERMEDIATE
STAGE OF CATALYTIC SYNTHESIS OF HYDRO-
CARBONS FROM WATER GAS. [1962] 7p. 13 refs.
Order from GT's or SLA \$1.10

62-14616

I. Eidus, Ya. T.
II. Zelinskii, N. D.

Trans. of Akademiya Nauk SSSR. Otdelenie Khimi-
cheskikh Nauk. Izvesiya, 1942 [no. 4] p. 190-194.

DESCRIPTION: *Carbides, Production, *Hydrocarbons,
*Gasoline, Synthesis, *Hydrogen, *Carbon compounds,
*Monoxides, Chemical reactions, Cobalt, Thorium
compounds, Dioxides, Catalysts, Catalysis.

It was established that carbides formed under the action
of carbon monoxide on the cobalt-thorium dioxide
(Kreisigruh Groti Kharabi, Georgia) catalyst composed
in the proportion of 100:13:100 constitute neither inter-
mediate products nor catalysts promoting the forma-
(Chemistry) - (Organic) (T. v. 5, no. 4) (over)

62-14616

Office of Technical Services

Gervart, Yu. G. and Frank-Kamenetskii, D. A.
PERIODIC REACTIONS AND MECHANISM OF OXIDATION OF HYDROCARBONS. [1961] 11p. 14 refs.
Order from CTS or SLA \$1.60 61-16665

Transl. of Akademich. Nauk SSSR, Otdelenie Khimiko-
cheskikh Nauk, Izdatelstvo, 1942, p. 210-220.

DESCRIPTORS: Hydrocarbons, Combustion, Planes,
Oxidation, Fuels

On passing a turbulent stream of mixtures of higher
hydrocarbons with air or oxygen through a reactor
under conditions insuring complete mixing of the intake
mixture with the reacting mixture periodic flashes
(pulsations) of cool flame are observed. Experimental
data support the chemical nature of the phenomena.
Formation and the stability of cool flame pulsations are
connected with the contents of unsaturated hydro-
carbons in the mixture. The frequency of pulsations is
not much affected by the type of fuel, its content in the
(Chemistry--Physical, T.F., v. 1, no. 7) (over)

61-16665

I. Gervart, Yu. G.
II. Frank-Kamenetskii, D. A.

12171

Office of Technical Services

Khlopin, V. G.		61-16661
CHEMISTRY IN THE ACADEMY OF SCIENCES USSR DURING THE PAST TWENTY-FIVE YEARS. [1961] 7 p. Order from OTS or SLA \$1.10		I. Khlopin, V. G. 61-16661
Condensed trans. of Akademiya Nauk SSSR, Otdelenie Khimicheskikh Nauk, Izvestiya, 1942, p. 333-365		
DESCRIPTORS: "Chemistry, Scientific research, High pressure research, Refractory materials, USSR		
The chemical researches carried out during the period 1917-1942 in laboratories directly attached to the Academy of Sciences are listed without reporting their details or giving specific references. A great expansion of the scope of chemical research is revealed with an ever increasing tie with various industries of U. S. S. R., although the primary purpose of the review is given as a discussion of the new trends in chemistry which originated during the above mentioned period. (Author)		
(Chemistry, TT, v. 6, no. 6)	(over)	176565
Office of Technical Services		

Iz Ak Nauk SSSR, Otdel Khim Nauk,

No. 1, page 28-34

~~Kadok~~

(1943)

Adsorption of Uranyl Salts on Solid Adsorbents
by Yu. M. Tolmachev.

AEC Trans (avail. Brookhaven)

Reactions of Some Oxygenated Organic Compounds Over
the Cobalt Catalyst Used for Synthesis of Gasoline
From Water Gas, by Ya. T. Kudus.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Khim Nauk,
1943, pp 65-72.

SLA 61-16925

Sc1

Feb 62

186, 836

Eidus, Ya. T., Epifanskii, P. F., and others.	THE ACTIVATING EFFECT OF OXIDES OF SOME METALS ON THE IRON-COPPER CONTACTS USED FOR SYNTHESIS OF GASOLINE FROM WATER GAS. [1961] 7p. 23 refs.	SLA \$1.10	61-16927
Order from OTS or Trans. of Akademii Nauk SSSR, Ordelenie Khimicheskikh Nauk. Izvestiya, 1943, p. 145-151.			I. Eidus, Ya. T. II. Epifanskii, P. F.
DESCRIPTORS: Gasoline, Synthesis, "Catalysts, Oxides, Carbon compounds, Monoxides, Hydrogen.	Fifteen catalysts were tested for synthesis of gasoline from water gas. These catalysts contained the following components: 100 Fe; 25 Cu; 2K ₂ CO ₃ ; 125 Kisatubik. The activating effect of promoters was investigated, consisting of oxides of various metals (manganese, magnesium, aluminum, thorium), 2% on the iron. As a rule catalysts prepared by precipitation were more active than those (Materials + Fuels, TT, v. 6, no. 7) (over)		
			Office of Technical Services

Absoorption Spectra of Complex Compounds of Noble Metals (Chlorometallates of the Platinum Group),
by A. V. Babayeva, 9 pp.

RUSSIAN, pag., Iz Ak Nauk SSSR, Otdel Khim Nauk,
No 3, 1943, pp 171-177.

SLA 40-14164
CIA/TID XX-81

NOT RELEASABLE TO FOREIGN NATIONALS

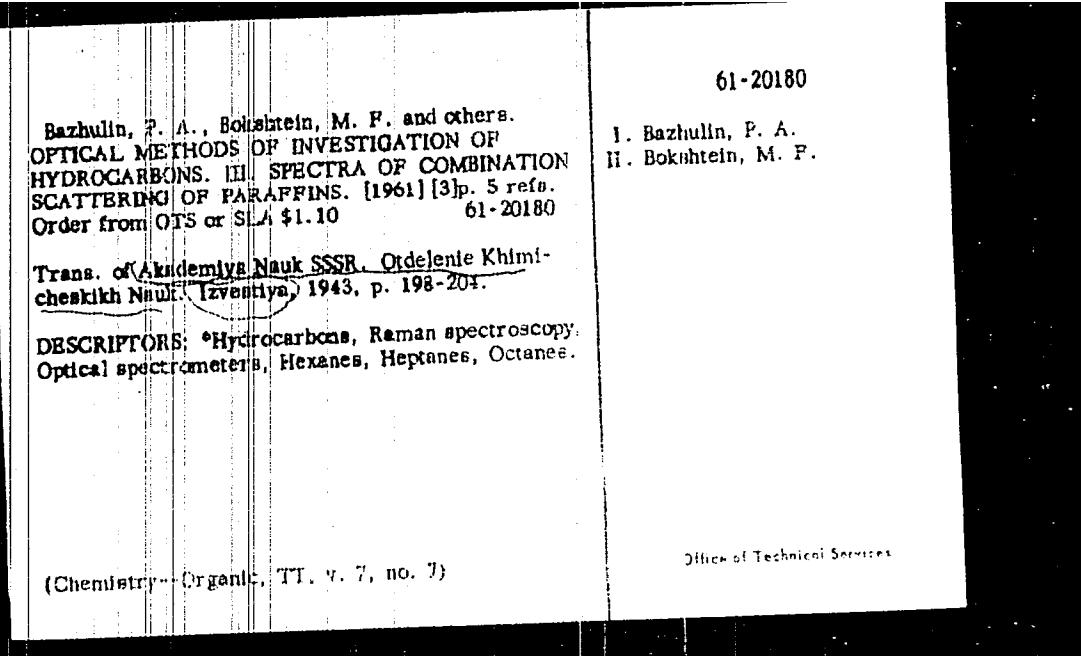
DS/R 184 M-1730 (20HII)

Sci - Chemistry, Minerals/Metals

Apr 60

USIB INTERNAL USE ONLY

114,138



Iz Ak Nauk SSSR, Otdel Khim Nauk,

Page 271-9 (1943)

CC-3154

Oxidation-Reduction Potentials of the System

$U(SO_4)_2$ - $UO_2(SO_4)_2$ as Related to the Acidity

of the Solution. by V. G. Khlopin and
A. M. Gurevich.

AEC Trans (avail. Brookhaven)

Notes on Synthesis of Individual Hydrocarbons,
by G. D. Gal'pern, 11 pp

RUSSIAN, per, Iz Ak Nauk SSSR, No 4, 1943,
pp 280-285.

OKN

SLA 61-16910

CIA/FDD/K-1621

23,659

Scientific - Chemistry May 55 CTS

			close 12
I. Eilagins, N. V.	II. Eilagins, N. V.		
Preparation of the composition of the contact agent, nature of the catalyst of the activity and the stability of the catalyst Cu-Cu ₂ Fe ₃ S ₄ -P ₂ O ₅ and carbonate in the synthesis of liquid hydrocarbons from carbon monoxide and hydrogen. [1951] 7p.			
Cost: from USSR RUM \$1.10	61-16912		

Transl. of Akad. Nauk SSSR, Otdelenie
Khimicheskikh Nauk, Izvestiya, 1943, p. 305-311.

Hydrocarbons, Synthesis, Carbonyls,
Amides, Hydrides, Chemistry
reactions, Catalysts, Stability, Properties, Iron
Compounds, Organic compounds, Thiones, Potassium
compounds, Carbonylates.

Preparation of catalysts of the composition Fe-Cu-
Th₂O₃-CO₃-Oxide is reported, which were tested
(Chemistry--Organic, T5, v. 1, no. 5) (over)

Office of Technical Services

Iz Ak Nauk SSSR, Otdel Khim Nauk,

page 381-8 (1943)

C C - 3157

Oxidation-Reduction Potentials of the System
 $\text{U}(\text{SO}_4)_2$ - $(\text{SO}_4)_3$ depending on the Acidity of the

Solution. by V. G. Khlopin and A. M. Gurevich.

AEC Trans (avail. Brookhaven)

FIT-3157

Moiseev, P. S. and Shamrai, F. I.
THE CORROSION RESISTANCE OF ALUMINUM-LITHIUM ALLOYS. [24 May 60 [9]p. (figs. omitted)
13 refs.

Order from OTS or SLA \$1.10 62-18772

Trans. of Akademiya Nauk SSSR. Otdelenie Khimicheskikh Nauk. Izvestiya 1943, p. 410-414.

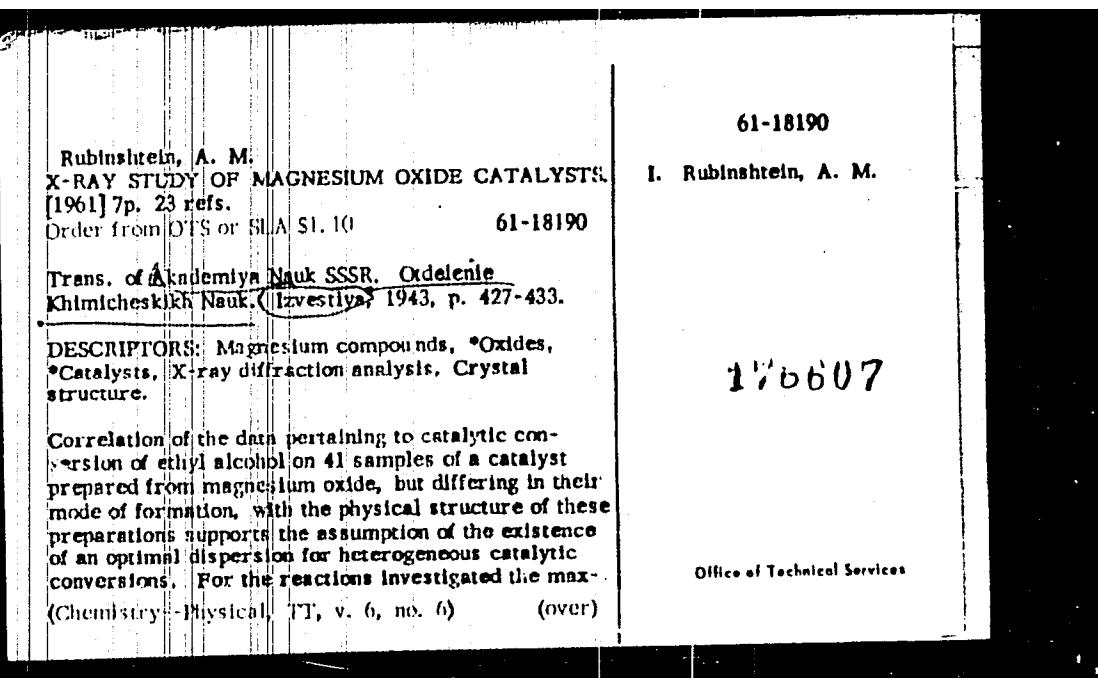
DESCRIPTORS: *Lithium alloys, *Aluminum alloys,
*Corrosion-resistant alloys, *Corrosion inhibition.

(Metallurgy + Corrosion, TT, v. 9, no. 7)

62-18772

I. Moiseev, P. S.
II. Shamrai, F. I.

Office of Technical Services



Verechagin, L. P. and Zelinskii, N. D.
INVESTIGATION OF CHEMICAL REACTIONS AT
HIGH TEMPERATURES UNDER SUPERHIGH PRES-
SURES. I: APPARATUS FOR THE STUDY OF CHEM-
ICAL REACTIONS UNDER PRESSURES UP TO 5,000
atm. AND AT HIGH TEMPERATURES. [1961] 8p.
(1 fig. omitted) 7 refs.
Order from OTS or SLA \$1.10

61-18189

Trans. of Akademiya Nauk SSSR. Otdelenie Khimi-
cheskikh Nauk. Izvestiya, 1943, p. 443-452.

DESCRIPTORS: *Chemical reactions, *High pressure
research, *High temperature research, *High pres-
sure compressors, Hydraulic systems, Design.

In equipment for the study of chemical reactions under
pressures of up to 5,000 atm and at high temperatures,
no mercury seal can be used for closure of the space
containing the fluid, which transmits the pressure of
the compound under study. The authors developed
apparatus which permits employment of compressed
(Engineering-Chemical, TT, v. 6, no. 7) (over)

61-18189

I. Verechagin, L. P.
II. Zelinskii, N. D.
III. Title: Apparatus ...

Office of Technical Services

Utilization of Microradiographic Methods for Investigation of the Nature of Distribution of Radioactive Elements in Natural Objects, by V. I. Baranov, A. P. Zhdanov, M. Yu. Deizenrot-Mysovskaya, 7 pp.

RUSSIAN, no per. Iz Ak Nauk SSSR, Otdel Khim Nauk, Vol 1, 1944, pp 20-28.

Sci Trans Center RT-104

USSR
Scientific - Geophysics

gb⁸⁸

Jan 54 CIB

Pushlenkov, M. F.	61-18177
EFFECT OF ELECTRICAL DISCHARGE UPON THE COOL FLAME OXIDATION OF BUTANE. [1961] 7p.	I. Pushlenkov, M. F.
15 refs.	
Order from OTS or SLA \$1.10	61-18177
Trans. of Akademiya Nauk SSSR, Otdelenie Khimi- cheskikh Nauk. (Izvestiya), 1944, [no. 1] p. 122-128.	176605
DESCRIPTORS: *Butanes, Oxidation, Electric dis- - charges, Flames, Electric discharges.	
The effect of the silent electrical discharge upon the cool flame oxidation of butane was studied and a pro- nounced decrease in the induction period of inflamma- tion was established. This effect is apparently due to the additional active centers originated. Some expan- sion of the inflammability region was revealed. (Author)	
(Chemistry--Organic, TT, v. 6, no. 6)	Office of Technical Services

<p>Petrov, A. D., Koptev, V. I., Kaplan, B. P. SYNTHESIS AND PROPERTIES OF ISOPARAFFINS WITH FROM 9 TO 12 CARBON ATOMS. [1961] 5p... 12 refs. Order from OTS or SLA \$1.10</p> <p>Trans. of Akademiya Nauk SSSR. Otdelenie Khimi- cheskikh Nauk [Izvestiya], 1944 (no. 1) p. 152-155.</p> <p>DESCRIPTORS: *Hydrocarbons, Synthesis, Molecular isomerism, Antiknock, Properties.</p> <p>Synthesis of five isoparaffins with from 9 to 12 carbon atoms and different extent of branching of the chain was effected through the tertiary alcohol by a Grignard reaction; of these, 2, 2, 3, 5-tetramethylhexane was synthesized for the first time. It was shown that hydro- carbons of the above mentioned composition possessing two quaternary carbons or one quaternary and two tertiary carbon atoms have high octane numbers of the order of about 100. (Author)</p> <p>(Chemistry--Organic, TT, v. 6, no. 6)</p>	<p>61-18176</p> <p>I. Title: Isoparaffins II. Petrov, A. D. III. Koptev, V. I. IV. Kaplan, B. P.</p> <p>176604</p> <p>Office of Technical Services</p>
--	--

<p>Petrov, A. D. and Vittikh, M. V. SYNTHESIS AND PROPERTIES OF ISOPARAFFIN HYDROCARBONS WITH 13 TO 24 CARBON ATOMS IN THE MOLECULE. [1961] 5p. 6 refs. Order from OTS or SLA \$1.10 61-18174</p> <p>Trans. of Akademiya Nauk SSSR. Otdelenie Khimi- cheskikh Nauk. Izvestiya. 1964 [no. 1] p. 238-242.</p> <p>DESCRIPTORS: Hydrocarbons, Molecular Isomerism, Synthesis, Properties.</p> <p>On the example of six isoparaffins with a T-like struc- ture containing from 13 to 24 carbon atoms in the molecule, for the most part newly synthesized com- pounds, it was demonstrated that the hydrocarbons of this type with from 21 to 24 carbon atoms are dis- tinguished by octene numbers close to 100 and sufficiently low pour points. (Author)</p> <p>(Chemistry--Organic, TT, v. 6, no. 6)</p>	<p>61-18174</p> <p>I. Title: Isoparaffins I. Petrov, A. D. II. Vittikh, M. V.</p> <p>176603</p> <p>Office of Technical Services</p>
--	---

Vol'fkovich, S. I.

WORK OF THE INSTITUTES AND LABORATORIES
OF THE DEPARTMENT OF CHEMISTRY OF THE
ACADEMY OF SCIENCES U.S.S.R. [1962] 4p.
Order from OTS or SLA \$1.10

62-14141

[Condensed] trans. of Akademiya Nauk SSSR. Otdelenie
Khimicheskikh Nauk. Izvestiya, 1944, no. 2/3,
p. 156-169.

DESCRIPTORS: *Scientific research, Inorganic substances, Organic compounds, Colloids, Electrochemistry, Physical chemistry, Geochemistry, Radium.

Excerpts of a report made to the general meeting of the Academy of Sciences on February 18, 1944, are given.

(Chemistry, TT, v. 8, no. 7)

62-14141

I. Vol'fkovich, S. I.

Office of Technical Services

The Investigation of Catalysis for the Hydrogenation
of CO by Joint Application of the Dynamic and the
Static Method. I. Study of the Activity of the
Complex Fe-Cu-ThO₂-K₂CO₃ Kieselguhr-Catalyst, by
V. T. Eildus, 21 pp.

RUSSIAN, per, Iz Ak Nauk, Otdel Khim Nauk, No 4,
1944, pp 255-262.

CIA/FDD/X-1159

OTS 66-7873

8172
196400

Scientific - Chemistry
CTS/DEK

Available in CIA Library
at Ohio State University
C 27830

Bogatskii, D. P.

THE FUNDAMENTALS OF A NEW COMPLEX
METHOD FOR THE CHEMICAL TREATMENT OF
OXIDIZED NICKEL-COBALT ORES WITH EM-
PLOYMENT OF SULPHURIC GAS. [1963] 15p.
(figs. omitted) 12 refs.

Order from OTS or SLA \$1.60 63-14098

Trans. of Akademya Nauk SSSR. Otdelenie
Khimicheskikh Nauk. Izvestiya, 1944, p. 272-282.

DESCRIPTORS: *Ores (Metal sources), *Nickel,
*Cobalt, *Oxides, Separation, *Sulfuric acid, *Gases,
*Reduction (Chemistry).

There is proposed an experimentally-verified original
method for the complex processing oxidized nickel-
cobalt ores with employment of waste sulphurous gas
according to the scheme: direct reduction followed by
leaching with a weak solution of sulphuric acid. There
(Metallurgy--Nonferrous Metals, TT, v. 10, no. 5) (over)

63-14098

I. Bogatskii, D. P.

Office of Technical Services

System Na_2SO_4 - Na_2CO_3 - NaCl -($\text{NaOH}\cdot\text{H}_2\text{O}$) and Its Application to the Removal of NaCl From NaOH , by S. Z. Makarov and L. S. Itkina.

Full translation.

RUSSIAN, biling ver, Iz Ak Nauk SSSR, Otdel Khim Nauk, No 5, 1944, pp 253-295.

Assoc Tech Sv Tr RJ-46

Scientific - Chemistry

Mar 53 CIS \$18.75 (\$2.90)

Invest Akad Nauk, SSSR, Otdel Khimicheskikh

1944, pp 296-308

Done by AEC

K-25 The chemical nature of the Ternary
I phase in the aluminium magnesium,
zinc system, by V. J. Mikheeva and
O. N. Kryukova.

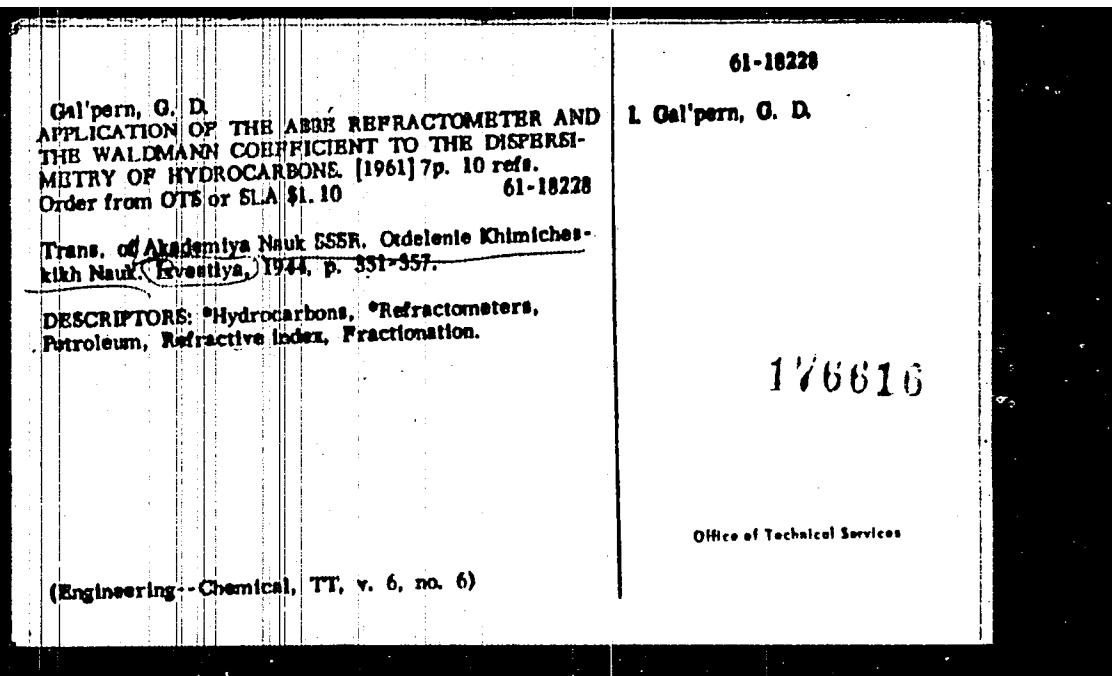
The Absorption Spectra of Aqueous Solutions of Salts
and Complex Compounds of Thorium, by Yu. M.
Tolmachev, 7 pp.

RUSSIAN per Iz Ak Nauk SSSR, Otdel Khim Nauk, 1944,
pp 320-321.

ABC Tr 1879
SAC KT-2144

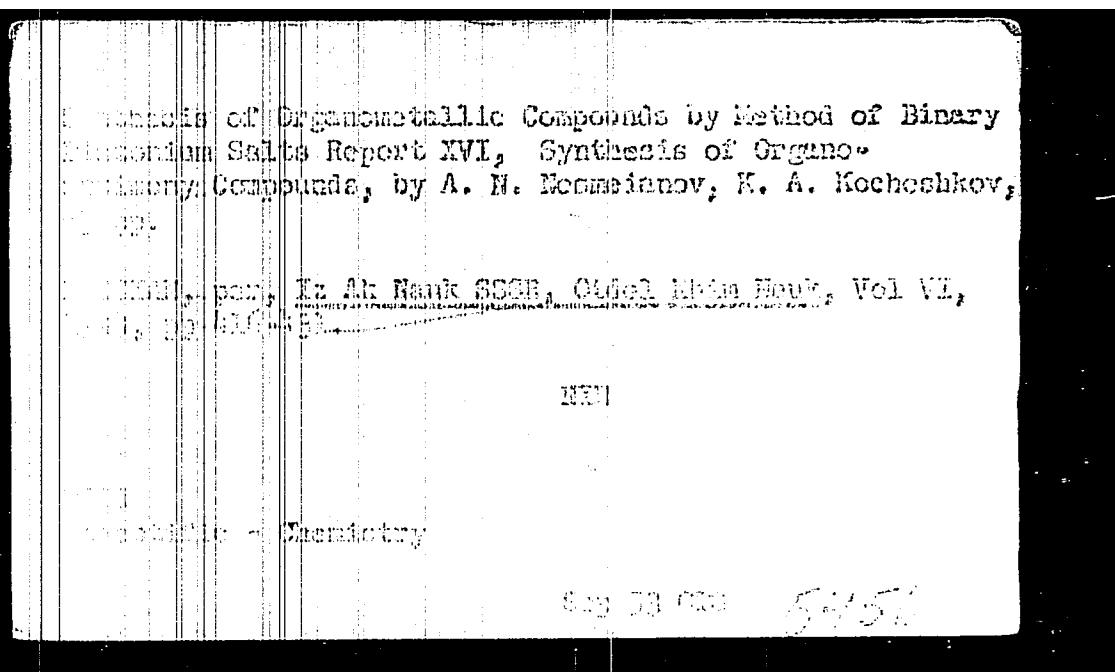
14,365

RUSSIAN to FRENCH
078 77-62-28998
Scientific - Chemistry
CRS/DEI



The Investigation of Catalysts for the Hydrogenation of CO by Joint Application of the Dynamic and the Static Method. II. Study of the Activity of Catalysts Consisting of Components of a Complex Fe-Gu-MnO₂-K₂CO₃-Kieselguhr-Catalyst, by Ia. T. Eridus, 12 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Khim Nauk,
No 5, 1944, pp 349-358. 10,982
Sci Trans Center RT-616
Scientific - Chemistry CTS/DEX SLA 61-18126



Shulkin, N. I.

NEW OBSERVATIONS ON CATALYTIC CONVERSIONS
OF SIX-MEMBERED TO FIVE-MEMBERED RINGS.

[1961] 7 p. 29 refs.

Order from OTS or S.A. \$1.10

61-18192

Trans. of Akademiya Nauk SSSR. Otdelenie Khimi-
cheskikh Nauk [Izvess.] 1961, p. 440-445.

DESCRIPTORS: Hydrocarbons, Monocyclic compounds;
*Cyclohexenes, *Cyclopentenes, Molecular Isomerism,
Chemical reactions, Catalysis.

When cyclohexyl chloride is contacted with alumina containing 10 per cent ferric oxide at 300°, a virtually complete elimination of hydrogen chloride takes place. This reaction is accompanied by isomerization of the cyclohexene formed, yielding 1-methyl-1-cyclopentene as the principal product and 1-methyl-2-cyclopentene in subordinated quantities. Hydrogen chloride, elim-

61-18192

I. Shulkin, N. I.

176608

Office of Technical Services

Preparation of Producer Gas Free of Tar, by
A. K. Gribkovskiy, D. N. Savoilovich.

Publ. per, Iz Akad. Nauk, Izdat. Nauk. i Tekhn.,
T. 1, 2, 1945

Dept. of Interior
TAT-E57 No. 631

Sci. Publs

Nov. 65

Denisenko, Ya. I.	I. and Naber, A. D.	II. Denisenko, Ya. I.	
STUDY OF HYDROCARBONS OF THE PHENYL CYCLOHEXANE SERIES. [1961] 6p. 22 refs. Order from OTS or SLA 44-10	HYDROCARBONS OF THE PHENYL CYCLOHEXANE SERIES. [1961] 6p. 22 refs. Order from OTS or SLA 44-10	61-18197	II. Naber, A. D.
From: <i>Ad. V. deputat na Nauk SSSR, Ordelenie</i> Akademii Nauk SSSR [1945, no. 1] p. 35-37		401874	
The following hydrocarbons were studied including the new isomers: 1,1-dimethylcyclohexane, 1,1-dimethylcyclopentane, 1,1-dimethylcycloheptane, 1,1-dimethylcyclooctane, 1,1-dimethyl- 1-phenylcyclohexane, 1,1-dimethyl-1-phenylcyclopentane, 1,1-dimethyl-1-phenylcycloheptane, 1,1-dimethyl-1-phenyl- hexane, 1,1-dimethyl-2-methylcycloheptane and 2-nitro-1- (Continued on page 24) (over)		Office of Technical Services	

Zelinskii, N. D. and Vereshchagin, L. F.
INVESTIGATION OF CHEMICAL REACTIONS AT
HIGH TEMPERATURES UNDER SUPERHIGH PRES-
SURES. II. POLYMERIZATION OF CYCLOHEXENE
AND VINYL CYCLOHEXENE. [1961] 9p. 13 refs.
Order from OTS or SLA \$1.10 61-18205

Trans. of Akademika Nauk SSSR. Otdelenie Khimi-
cheskikh Nauk. Izdatiya, 1945 [no. 1] p. 44-51.

DESCRIPTORS: *Cyclohexenes, Vinyl radicals,
*Polymerization, Polymers, *High temperature re-
search, *High pressure research, *Chemical reactions.

The study of polymerization of cyclohexene, vinylcyclo-
hexene and unsaturated compounds of synthesis showed
that polymerization of cyclohexene under pressures up
to 4,000 kg/cm² and temperatures up to 350° C is
independent of the pressure. The polymers isolated do
not differ from those obtained by thermal polymerization
(Chemistry-Organic, TT, v. 6, no. 6) (over)

61-18205

I. Zelinskii, N. D.
II. Vereshchagin, L. F.
III. Title: Polymerization...

176609

Office of Technical Services

Freidlin, L. Kh., Balandin, A. A. and others.
CATALYTIC SUBSTITUTION OF HALOGEN BY A
HYDROXYL IN THE AROMATIC SERIES.
I. CATALYTIC ACTIVITY OF SILICA GELS AND
THEIR INACTIVATION. [1961] 9p. 17 refs.
Order from O'TS or SLA \$1.10

61-18219

- I. Freidlin, L. Kh.
II. Balandin, A. A.
III. Title: Catalytic...

SLN TT-64-10277

176615

Trans. of Akademiya Nauk SSSR. Odelenie
Khimicheskikh Nauk. Izvestiya 1945 [no. 1]
p. 53-60

DESCRIPTORS: Benzenes, Chlorides, Hydrolysis,
Phenols, Silicon compounds, Dicarboxylic acids,
*Catalysis.

The catalytic activity of silica gels in vapor phase
hydrolysis of chlorobenzene and their inactivation was
studied. Silica gel prepared according to Okatov was
found to possess a considerable catalytic activity in
this process. The yield of phenol in its presence
(Chemistry--Organic, IT, v. 6, no. 6) (over)

Office of Technical Services

		61-18236	
Eidus, Ya. T.	I. Eidus, Ya. T.		
INVESTIGATION OF CATALYSTS FOR HYDROGENATION OF CARBON MONOXIDE BY SIMULTANEOUS APPLICATION OF THE DYNAMIC AND STATIC METHODS. IN THE PART PLAYED BY THE ALKALI-METHODS IN THE FORMATION OF THE LINE ACTIVATOR IN THE FORMATION OF THE SURFACE OF THE CATALYST IRON-COPPER-THORIA-POTASSIUM CARBONATE-KIESELGUHR [Issledovanie Katalizatorov Gidrirovaniya Okisi Ugle-roda Svyazeynym Primeneniem Dinamicheskogo i staticheskogo Metodov Seobshchenie 3]. [1961] 10p. 36 refs.	61-18236	251811	
Order from OTS or CIA \$1.10 Trans. of Akademika Nauk SSSR, Otdelenie Khimicheskikh Nauk, Izvestiya, 1945, p. 62-70.			
DESCRIPTORS: *Catalysts, Carbon compound, *Monoxides, *Hydrogenation, Hydrocarbons, Synthesis, *Iron catalysts, Surface properties, Iron, Copper, Thorium compounds, Oxides, Potassium compounds, (Chemistry--Physical, TT, v. 6, no. 7) (over)			Office of Technical Services

Arbusov, B. A. and Zoroestrova, V. M.
DIENE COMPOUNDS. I. SIMULTANEOUS ACTION
OF CHLORINE AND ETHYLENE OXIDE ON 1,
3-BUTADIENE. [1961] 4p. 21 refs.
Order from OTS or SLA \$1.10 61-18220

Condensed trans. of Akademiya Nauk SSSR.
Otdelenie Khimicheskikh Nauk, Izvestiya, 1945, [no. 1]
p. 113-118.

DESCRIPTORS: Butadienes, Chlorine, Ethylene
oxide, Chemical reactions.

Simultaneous action of chlorine and ethylene oxide on
1, 3-butadiene yields chlorine addition products of
butadiene and also compounds resulting from addition
of 1 or 2 molecules of β -chloroethyl hypochlorite;
when one molecule of the hypochlorite is combined, its
component parts add in position 1, 2 or 1, 4. From
(Chemistry--Organic, TT, v. 6, no. 7) (over)

61-18220

I. Arbusov, B. A.
II. Zoroestrova, V. M.
III. Title: Simultaneous...

1015/13

Office of Technical Services

Arbuzov, Yu. A., Zelinskii, N. D., and Shulkin, N. I.
OXIDATION OF CYCLOHEXENE WITH SELENIOUS
ACID: A NEW METHOD OF PREPARATION OF 1,3-
CYCLOHEXADIENE. [1961] 4p. 16 refs.
Order from OTS or SLA \$1.10

61-18221

- I. Arbuzov, Yu. A.
II. Zelinskii, N. D.
III. Shulkin, N. I.
IV. Title: New ...

Condensed trans. of Akademiya Nauk SSSR, Otdelenie
Khimicheskikh Nauk, Izvestiya, 1945, p. 163-166.

DESCRIPTORS: *Cyclohexenes, Oxidation, *Cyclohexadienes, Synthesis, Acetates, Selenious acid.

Conditions were determined under which methods of preparation of 1,3-cyclohexadiene, the acetate of 1-cyclohexen-3-ol and the diacetate of cyclohexenediol reported in the literature can be improved and higher yields of these products obtained.

(Chemistry--Organic, TT, v. 6, no. 9)

Office of Technical Services

427

Nesmeyanov, A. N. and Borisov, A. Ye.
SYNTHESIS AND STRUCTURE OF THE PRODUCTS
FROM THE REACTION OF ANTIMONY PENTA-
CHLORINE AND ACETYLENE. 14 Mar 61, 6p.
Order from LC or SLA m\$1.80, ph\$1.80 61-14473

Partial trans. (p. 254-259) of [Akademiya Nauk SSSR.
Otdeleniye Khimicheskikh Nauk. Izvestiya] 1945
(no. 3) p. 251-260.

(Chemistry--Organic, TT, v. 5, no. 12)

61-14473

1. Antimony chlorides--
Chemical reactions
2. Acetylenes--Chemical
reactions
3. Sulfine--Synthesis

I. Nesmeyanov, A. N.
II. Borisov, A. Ye.

151882

Office of Technical Services

Terenin, A. N. and Kachur, L. A. LUMINESCENCE IN CATALYTIC OXIDATION OF VAPORIZED ORGANIC COMPOUNDS. [1961] 8p. 9 refs. Order from OTS or SLA \$1.10	61-18231
Trans. of Akademiya Nauk SSSR. <u>Oddelenie</u> <u>Khimicheskikh Nauk. Izvestiya.</u> 1965, p. 271-278.	
DESCRIPTORS: Magnesium compounds, "Oxides, •Alcohols, Oxidation, "Organic compounds, •Luminescence, Catalysts.	
When a mixture of vapors of ethanol with air is passed over an aerosol of magnesium oxide at 350-400° luminescence of the aerosol is observed, the intensity of which directly depends upon the concentration of vapors of alcohol and of oxygen. Various gaseous products of oxidation of alcohol are simultaneously (Chemistry--Physical, TT, v. 6, no. 6) (over)	176617

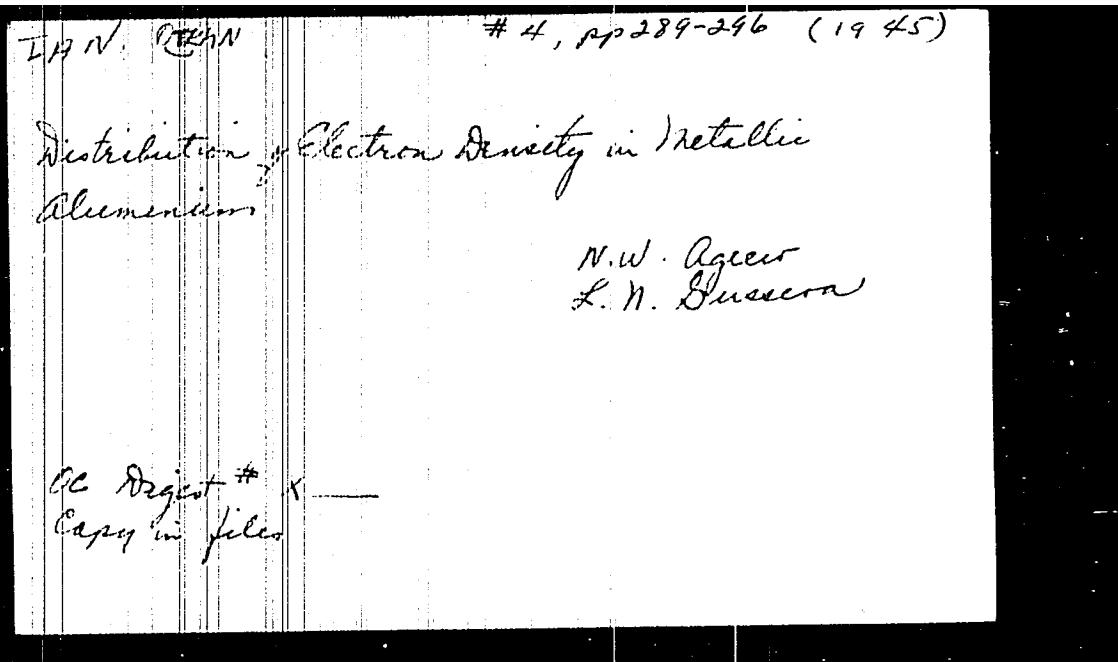
Office of Technical Services

Molecular Weight of Cellulose, by O. P. Golova,
V. I. Ivanov, 7 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel. Khim. Nauk,
No 3, 1945, pp 279-381.

Sci Trans Center RT-489

Scientific - Physics 10,900
CTS/DEK



			62-14143	
Abramov, V. S.		I. Abramov, V. S.		
INTERACTION OF CYCLONES WITH COMPOUNDS				
CONTAINING THE VINYL RADICAL. [1962] [2]p.				
5 refs.				
Order from OTS or SLA \$1.10	62-14143			
[Condensed] trans. of Akademiya Nauk SSSR. Otdelenie				
Khimicheskikh Nauk. Izvestiya, 1945, no. 4, p. 330-338				
DESCRIPTORS: *Vinyl radicals, Chemical reactions,				
Cyclones, Cyclopentenones.				
(Chemistry--Organic, TT, v. 8, no. 7)		Office of Technical Services		

Vereshchagin, L. F., and Preobrazhenskii, V. A.	61-18886		
CHEMICAL REACTIONS AT HIGH TEMPERATURES AND PRESSURES. III. EQUIPMENT FOR OXIDATION WITH OXYGEN UNDER PRESSURES UP TO 1,500 ATMOSPHERES: STUDY OF THE METHOD OF OXI- DATION OF ORGANIC COMPOUNDS. [1961] 5p. 10 refs.	I. Vereshchagin, L. F. II. Preobrazhenskii, V. A. III. Title: Equipment... IV. Title: Study...		
Order from OTS or SLA \$1.10	61-18886		
Transl. of Akademiya Nauk SSSR. Odelenie Khimi- cheskikh Nauk. Izvestiya, 1945, p. 359-363.			
DESCRIPTION: *Cyclohexenes, Oxidation, Chemical reactions, Temperature, Pressure, *Oxygen, Labo- ratory equipment, Organic compounds.			
Equipment was designed with which oxygen pressures of up to 1500 atm can be reached. With the aid of this apparatus some experiments of oxidation of cyclo-			
(Chemistry-Organic TT, v. 6, no. 11) (over)	Office of Technical Services		

Freidlin, L. Kh.	Balandin, A. A. and others.	61-18887 63-18671	
CATALYTIC SUBSTITUTION OF A HALOGEN BY A HYDROXYL IN THE AROMATIC SERIES. II. PROMOTERS OF SILICA GEL. [1961] 8p. 10 refs.	Order from QTS or STA \$1.10	I. Freidlin, L. Kh. II. Balandin, A. A. III. Title: Promoters...	
	61-18887 63-18671		
Trans. of Akademiya Nauk SSSR. Otdelenie Khimicheskikh Nauk, Izvestiya, 1945, p. 375-383.			
DESCRIPTORS: *Benzene, *Chlorides, Chemical reactions, *Silicon compounds, *Dioxides *Gels, Calcium compounds, Barium compounds, Magnesium compounds, Catalysts, Catalysts, *Halogenes *Hydroxides, Substitution reactions.			
Tests of the effect exerted by various salts on the activity of silica gel in vapor phase conversion of chloroethylene at 450-600° revealed that these additions always invariably reduce the catalytic activity of silica gel. Some salts, such as lithium chloride, tr-(Chemistry-Organic, TT, v. 6, no. 11) (over)			
		Office of Technical Services	

Voroshchagin, L. F., Zelinskii, N. D. and others.
CHEMICAL REACTIONS AT HIGH TEMPERATURES
AND HIGH PRESSURES. IV. EXPLOSIVE DECOMPO-
SITION OF CYCLOPENTADIENE UNDER HIGH
PRESSURES. [1961] p. 11 refs.

Order from OTS or SLA \$1.10

61-18892

61-18892
I. Vereshchagin, L. F.
II. Zelinskii, N. D.
III. Title: Explosive...

Condensed trans. of Akademiya Nauk SSSR. Otdelenie
Khimicheskikh Nauk. Izvestiya, 1945, p. 469-478.

DESCRIPTIONS: *Cyclopentadiene. Pentadienes,
*Cyclohexadienes. Decomposition, *Explosions. Shock
waves. Detonation. Chemical reactions. Temperature,
Pressure.

Equipment was constructed for compression of organic
substances at a maximum rate of 400 atm/4 sec
and permitting a thermocouple to be kept inside the tubes
with the sample. With this apparatus the mechanism of
(Chemistry - Physical, TT, v. 6, no. 11) (over)

Office of Technical Services

455

Zelinskii, N. D., Arbuzov, Yu. A., and Batuev, M. I.
CONTACT CONVERSIONS OF 1,3-CYCLOHEXADIENE AND 1,4-CYCLOHEXADIENE. [1961] 7p.
17 refs.

Order from OTS or SLA \$1.10 61-18891

Trans. of Akademii Nauk SSSR. Otdelenie Khimicheskikh Nauk. Izvestiya, 1945, p. 486-491.

DESCRIPTORS: *Cyclohexadienes, Chemical reactions
*Beryllium compounds, *Oxides, Catalysts, Catalysis,
Hydrogenation, Cyclohexenes, Methyl radicals, Cyclopentenes, Cyclopentanes, Cyclohexanes, Benzenes, Hexanes, Pentenes, Pentanes, Raman spectroscopy.

Contact conversions of two cyclohexadienes were studied in the presence of beryllium oxide at 400°. The principal products from 1,3- and 1,4-cyclohexadiene, respectively are as follows: benzene, 65 and 82 mole per cent; methylcyclopentene isomers, 28 and 12 mole (Chemistry--Organic, TT, v. 6, no. 10) (over)

61-18891

I. Zelinskii, N. D.
II. Arbuzov, Yu. A.
III. Batuev, M. I.

187301

Office of Technical Services

Nesmeyanov, A. N. and Kocheshkov, K. A.
SYNTHESIS OF METALLOORGANIC COMPOUNDS BY
METHOD OF DOUBLE DIAZONIUM SALTS. XVII.
SYNTHESIS OF TETRA-PHENYLLEAD BY THE AC-
TION OF METALLIC LEAD POWDER ON PHENYL-
DIAZONIUM BOROFUORIDE. [1963] 5p. 10 refs.
Order from OTS or SLA \$1.10 63-16035

Trans. of Akademiya Nauk SSSR, Otdelenie Khimicheskikh Nauk, Izvestiya, 1945, no. 5, p. 522-524.

DESCRIPTORS: *Phenyl radicals, *Lead compounds,
*Boron compounds, *Fluorides, Lead, Metal powders,
Azo radicals, *Metalorganic compounds, Synthesis
(Chemistry).

It is shown that through the decomposition of phenyl-diazonium borofluoride with metallic lead powder tetraphenyllead is obtained. (Author)
(Chemistry--Organic, TT, v. 10, no. 9)

63-16035

- I. Title: Phenyl diazonium
borofluoride
2. Title: Tetraphenyllead
- I. Nesmeyanov, A. N.
- II. Kocheshkov, K. A.
- III. Title: Synthesis . . .

Office of Technical Services

TAN, ~~der Khan~~

6, 190559-80 (1945)

Hornalagans Groups of Places

S. S. Makarov

CC digit # X
Copy in file

The Solubility of Ammonium Nitrate in
Organic Compounds, by O. K. Khayshbashev,
21 pp.

RUSSIAN, psr, Iz Ak Nauk SSSR, Otdel Khim
Nauk, No 6, 1945, pp 587-596.

SLA 60-18538

Sci.

20.3, 228

Jun 62

СВЕДЕНИЯ АКАДЕМИИ МАУК СССР: ОТДЕЛЕНИЕ ФИЗИЧЕСКОЕ
МТКН НАУК

1945	N6	P603-608	70-21058 <*>
1947	N6	P606-616	62-11677 <=>
1950	N2	P107-151	70-22638 <*>
1952	N6	P1075-1081	62-25279 <*>
1958	N5	P624-628	70-21047 <*>
1958	N10	P1104-1191	70-21040 <*>
1958	N10	P1259-1263	70-21049 <*>
1958	N11	P1303-1309	70-21050 <*>
1959	N1	P1110-1114	70-21051 <*>
1959	N2	P350-352	70-21052 <*>
1959	N7	P1169-1176	70-21053 <*>
1959	N10	P1059-1061	70-21054 <*>
1960	N8	P1520-1521	70-10554-078 <*>

ORDER FROM NTC

Studies in the Field of the Polycondensation Reaction, Pt. 6. Acidolysis and Aminolysis of Polyimides, by V. V. Morshak, V. A. Zamyatina,
8 pp.

RUSSIAN, PER, Iz Akad Nauk SSSR, Otech Khim Nauk,
No 6, 1965, pp 609-616.

Assoc Tech Sr
B4026A

Sci - Check
Apr 59
OAS L. No 5

85-916

Makarova, L. G. and Nesmeyanov, A. N.
TWO TYPES OF DECOMPOSITION OF DIPHENYL-
IODONIUM SALTS. I. of Decomposition and For-
mation of Onium Salts and Synthesis of Heteroorganic
Compounds through Onium Compounds. [1960] 10p.
Order from ATS \$14.50 ATS-91N47R

Trans. of Akademika Neuk SSSR, Ordzhonikidze
Khimicheskii Nauk, Tver' [ya] 1965, no. 6,
p. 617-626.

117-3248
3248
(Chemistry--Organic, TT, v. 5, no. 8)

61-12752

1. Onium compounds--
Chemical reactions
2. Onium compounds--
Decomposition
3. Title: Heteroorganic
compounds
4. Makarova, L. G.
5. Nesmeyanov, A. N.
6. ATS-91N47R
7. Associated Technical Ser-
vices, Inc., East Orange,
N. J.
8. Title: Decomposition ...

Office of Technical Services

Reactivity of Halogenobenzenes in Catalytic Hydrolysis in the Vapor Phase, by L. Kh. Freidlin, A. A. Balandin, G. A. Fridman.

RUSSIAN, por, Iz Ak Nauk SSSR, Otdel Khim Nauk, 1945, pp 655-663.

OTS 61-18088

Sci

Mar 52

Print Vol VII, No 2

189,552

61-18895

Arbuzov, Yu. A., Batuev, M. I., and Zelinskii, N. D.
CONTACT ISOMERIZATION OF CYCLOHEXENE.
[1961] 5p. 12 refs.

Order from OTS or SLA \$1.10 61-18895

Trans. of Akademiya Nauk SSSR, Otdelenie Khimi-
cheskikh Nauk, Izvestiya, 1945, p. 665-668.

DESCRIPTORS: *Cyclohexenes, Isomeric transitions,
*Beryllium compounds, *Oxides, Catalysts, Catalysis,
Raman spectroscopy.

Contact isomerization of cyclohexene under the action
of beryllium oxide was studied at 400°. A Raman
spectroscopical study of the reaction products showed
them to consist of 1-methyl-1-cyclopentene, 3-methyl-
1-cyclopentene, methyl-cyclopentane and unchanged
cyclohexene, the first of the above-mentioned com-
(Chemistry-Organic, TT, v. 6, no. 10) (over)

I. Arbuzov, Yu. A.
II. Batuev, M. I.
III. Zelinskii, N. D.

18.503

Office of Technical Services

Eldus, Ya. T., Elagina, N. V., and Zelinskii, N. D. SYNTHESIS OF SOME OLEFINIC HYDROCARBONS FROM PRIMARY ALKYL MAGNESIUM HALIDES AND CARBON MONOXIDE UNDER PRESSURE. [1961] 4p. 6 refs.	Order from OTS or SLA \$1.10	61-18885	61-18885
Trans. of Akademiya Nauk SSSR, Otdelenie Khimi- cheskikh Nauk, Izvestiya, 1945, p. 672-674.			
DESCRIPTORS: *Hydrocarbons, *Ethylenes, Synthesis, *Alkyl radicals, *Magnesium compounds, *Halides, *Carbon compounds, *Monoxides, *Chlorides, Chemi- cal reactions.			
Preparation of 4-nonene and 2,8-dimethyl-4-nonene was carried out as examples of the synthesis of olefins with odd numbers of carbon atoms from carbon monoxide and Grignard reagents containing primary alkyls. By (Chemistry--Organic, IT, v. 6, no. 10) (over)			Office of Technical Services

JAN. 0 KN 1

1 pp 47-v6 (1946)

Kinetics of Exothermic Catalytic Flame
Reactions I.

O. M. Tadeo

Done by Draf Rev 3d.

Canada X334

See 16 May 50 listing

H.E.C. 1955

Liberman, A. L. and Kazanskii, B. A.
PREPARATION OF 1,1-DIMETHYLCYCLOHEXENES,
1,1-DIMETHYLCYCLOHEXANE AND OF 3,3-DI-
METHYL-1-CYCLOHEXANOL FROM DIMEDONE.
[1961] 5p. 10 refs.

Order from OTS or SLA \$1.10 61-20110

Condensed trans. of Akademiya Nauk SSSR. Ordelenie
Khimicheskikh Nauk. Izvestiya, 1946, p. 77-82.

DESCRIPTORS: *Cyclohexenes, *Cyclohexanols,
*Cyclohexanes, Hexanes, Methyl radicals, Synthesis,
Hydantoins, Pentanones, Hydrogenation.

Hydrogenation of 5,5-dimethyl-1,3-cyclohexanedione
(dimedone) in the presence of platinized carbon
activated with chloroplatinic acid in organic solvents,
such as ether, dioxane, acetic acid, yields 10-20% of
1,1-dimethylcyclohexane, and 40-60% of 3,3-di-

(Chemistry--Organic, T1, v. 7, no. 7) (over)

61-20110

I. Liberman, A. L.
II. Kazanskii, B. A.

Office of Technical Services